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=> s (thermal?(5a)inhibit?)(10a)starch?
            8 FILE HCA
L1
            1 FILE IFIPAT
L2
            1 FILE USPATFULL
L3
            0 FILE JAPIO
L4
TOTAL FOR ALL FILES
           10 (THERMAL? (5A) INHIBIT?) (10A) STARCH?
=> s 15 and (anhydrous(10a)starch?)
            0 FILE HCA
L7
            O FILE IFIPAT
            O FILE USPATFULL
\Gamma8
L9
            0 FILE JAPIO
TOTAL FOR ALL FILES
           0 L5 AND (ANHYDROUS(10A) STARCH?)
=> d 15 1-10
    ANSWER 1 OF 10 HCA COPYRIGHT 1997 ACS
ΑN
    125:204530 HCA
ΤI
    Pharmaceutical products containing thermally-
    inhibited starches
IN
    Kasica, James J.; Thomas, David J.; Zallie, James P.
PΑ
    National Starch and Chemical Investment Holding Corp., USA
SO
    PCT Int. Appl., 89 pp.
    CODEN: PIXXD2
    WO 9622110 A2 960725
PΤ
    W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
DS
        ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
        LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
```

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,

IE, IT, LU, MC, ML, MR, NE, NL, PT, SE

WO 96-US612 960117

AΙ

```
PRAI US 95-375321 950118
DT
     Patent
LΆ
    English
L5
     ANSWER 2 OF 10 HCA COPYRIGHT 1997 ACS
     125:204119 HCA
ΑN
ΤI
     Cosmetics containing thermally-inhibited
     starches
     Jeffcoat, Roger; Pasapane, Joseph; Ronco, Donna L.; Solarek, Daniel
IN
     B.; Hanchett, Douglas J.
PA
     National Starch and Chemical Investment Holding Co, USA
SO
     PCT Int. Appl., 113 pp.
     CODEN: PIXXD2
ΡI
     WO 9622073 A2
                   960725
     W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
DS
         GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
         MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
         TM, TT
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
ΑI
    WO 96-US613 960117
PRAI US 95-375320 950118
DT
     Patent
LΑ
     English
L5
     ANSWER 3 OF 10 HCA COPYRIGHT 1997 ACS
ΑN
     125:198990 HCA
     Water-based adhesives containing thermally
ΤI
     inhibited starches
IN
     Koubek, Timothy C.; Nesiewicz, Russell J.; Philbin, Michael T.;
     Wieczorek, Joseph, Jr.; Chiu, Chung-Wai; Schiermeyer, Eleanor;
     Thomas, David J.; Shah, Manish B.; Solarek, Daniel B.
PA
     National Starch and Chemical Investment Holding Corp., USA
SO
     PCT Int. Appl., 99 pp.
     CODEN: PIXXD2
     WO 9623038 A1
ΡI
                   960801
    W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
DS
         ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
         LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
         SG, SI
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN
ΑI
     WO 96-US988 960124
PRAI US 95-377544 950124
     US 95-385259 950218
DT
     Patent
LA
     English
     ANSWER 4 OF 10 HCA COPYRIGHT 1997 ACS
L5
     125:198924 HCA
AN
ΤI
     Paper containing thermally inhibited
     starches as wet-end additives
     Solarek, Daniel B.; Jeffcoat, Roger; Koltai, Kimberly A.; Chiu,
IN
     Chung-Wai; Schiermeyer, Eleanor; Thomas, David J.; Shah, Manish B.
PA
     National Starch and Chemical Investment Holding Corp., USA
     PCT Int. Appl., 94 pp.
SO
     CODEN: PIXXD2
PΙ
     WO 9623104 A1 960801
DS
     W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
         ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
         LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN
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ΑI

WO 96-US999 960124

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PRAI US 95-377718 950124
DT
     Patent
LА
     English
L5
     ANSWER 5 OF 10 HCA COPYRIGHT 1997 ACS
ΑN
     124:346442 HCA
ΤI
     Thermally inhibited starches and
     flours and process for their production
IN
     Chiu, Chung-wai; Schiermeyer, Eleanor; Thomas, David J.; Shah,
     Manish B.
     National Starch and Chemical Investment Holding Co, USA
PΑ
SO
     PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
                   960215
ΡI
     WO 9604315 A1
       AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
DS
         GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
         MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
         UA, UZ
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
ΑI
     WO 95-US684 950118
PRAI WO 94-US8559 940729
     US 94-296211 940825
DT
     Patent
LΑ
     English
L5
     ANSWER 6 OF 10 HCA COPYRIGHT 1997 ACS
ΑN
     124:320038 HCA
ΤI
     Thermally inhibited pre-gelatinized
     starches and flours and process for their production
ΙN
     Shah, Manish B.; Thomas, David L.; Chiu, Chung-wai
     National Starch and Chemical Investment Holding Co, USA
PA
     PCT Int. Appl., 25 pp.
SO
     CODEN: PIXXD2
                   960215
     WO 9604316 A1
ΡI
       AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
DS
         GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
         MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
         UA, US
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
ΑI
     WO 95-US688 950118
PRAI WO 94-US8559 940729
     US 94-296211 940825
DT
     Patent
LA
     English
     ANSWER 7 OF 10 HCA COPYRIGHT 1997 ACS
L5
ΑN
     124:315512 HCA
TI
     Foods containing thermally-inhibited
     starches and flours
IN
     Thomas, David J.; Chiu, Chung-Wai; Schiermeyer, Eleanor; Shah,
     Manish B.; Hanchett, Douglas J.; Jeffcoat, Roger
PA
     National Starch and Chemical Investment Holding Co, USA
SO
     PCT Int. Appl., 114 pp.
     CODEN: PIXXD2
     WO 9603892 Al 960215
PΙ
DS
        AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, JP, KP, KR,
         LK, LU, MG, MN, MW, NO, PL, RO, RU, SD, SE, US
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
     WO 95-US9138 950728
PRAI WO 94-US8559 940729
     US 94-296211 940825
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WO 95-US682 950118

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US 95-473688 950607
    US 95-481963 950607
DT
    Patent
LΑ
    English
L5
    ANSWER 8 OF 10 HCA COPYRIGHT 1997 ACS
ΑN
    124:315509 HCA
    Foods containing thermally-inhibited and
TI
    pre-gelatinized starches and flours
     Chiu, Chung-wai; Schiermeyer, Eleanor; Thomas, David J.; Shah,
IN
    Manish B.
PA
    National Starch and Chemical Investment Holding Co, USA
so
     PCT Int. Appl., 38 pp.
    CODEN: PIXXD2
                   960215
PΙ
    WO 9603891 A1
DS
    W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
         GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
        MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
        UA, VN
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
        IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
    WO 95-US682 950118
PRAI WO 94-US8559 940729
     US 94-296211 940825
DT
     Patent
LA
    English
L5
    ANSWER 9 OF 10 IFIPAT COPYRIGHT 1997 IFI
AN
      1562767 IFIPAT; IFIUDB; IFICDB
      STABILIZATION OF THICKENED AQUEOUS FLUIDS; IODIDE OR IODATE
ΤI
IN
      SANDELL LIONEL S
PΑ
      DU PONT DE NEMOURS, E I & CO (25048)
PΙ
         4486317 841204
                          (CITED IN 005 LATER PATENTS)
ΑI
      US
         82-415681 820907
         81-225725 810116 CONTINUATION-IN-PART 4380482
RLI
     US
FI
      US
         4486317
                  841204
      US 4380482
DT
      UTILITY; REASSIGNED
FS
      CHEMICAL
os
      CA 102:64295
CLMN
     15
    ANSWER 10 OF 10 USPATFULL
L5
AN
       84:67476 USPATFULL
TI
       Stabilization of thickened aqueous fluids
IN
       Sandell, Lionel S., Hagerstown, MD, United States
PΑ
       E. I. Du Pont de Nemours and Company, Wilmington, DE, United
       States (U.S. corporation)
      US 4486317 841204
ΡI
      US 82-415681 820907 (6)
ΑI
       Continuation-in-part of Ser. No. US 81-225725, filed on 16 Jan
       1981, now patented, Pat. No. US 4380482
DT
       Utility
LN.CNT 961
       INCLM: 252/008.500A
INCL
       INCLS: 149/002.000; 149/021.000; 149/041.000; 149/047.000;
              149/108.800; 252/008.500C; 252/008.550R; 252/315.300
NCL
       NCLM:
             507/110.000
      NCLS: 149/002.000; 149/021.000; 149/041.000; 149/047.000;
              149/108.800; 252/315.300; 507/111.000; 507/112.000;
              507/145.000; 507/211.000; 507/217.000; 507/903.000;
              507/922.000
IC
       [3]
       ICM: C06B045-02
```

ICS: C09K007-02; E21B043-26

EXF 252/8.5A; 252/8.5C; 252/8.55R; 252/315.3; 149/2; 149/21; 149/36; 149/38; 149/41; 149/44; 149/47; 149/92 CAS INDEXING IS AVAILABLE FOR THIS PATENT. => d kwic 15 1-10 ANSWER 1 OF 10 HCA COPYRIGHT 1997 ACS Pharmaceutical products containing thermally-TIinhibited starches AΒ Thermally-inhibited starches and flours are used in pharmaceutical products as a diluent, filler, carrier, binder, disintegrant, coating, thickener, moisture sink, and the. . . by freeze-drying. Preferably, the pH is adjusted to a neutral pH or above prior to the dehydration and heat treatment. Thermally-inhibited corn starch was prepd. by adjustment to pH = 9.0 and dehydration and heat treatment at 160.degree. for 30 min. Prepn. of. . . ST pharmaceutical product thermal inhibition starch; controlled release tablet aspirin starch ITPharmaceutical dosage forms (suppositories, vaginal, pharmaceutical products contg. thermally-inhibited starches) ITPharmaceutical dosage forms (tablets, controlled-release, pharmaceutical products contg. thermally-inhibited starches) IT 75-56-9, Propylene oxide, reactions 108-24-7, Acetic anhydride 7647-01-0, Hydrochloric acid, reactions 122431-97-4 RL: RCT (Reactant) (pharmaceutical products contg. thermallyinhibited starches) IT 50-27-1, Estriol 50-78-2, Aspirin 9005-25-8, Starch, biological studies 9005-25-8D, Starch, crosslinked 9005-82-7, Amylose RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical products contg. thermallyinhibited starches) L5 ANSWER 2 OF 10 HCA COPYRIGHT 1997 ACS TI Cosmetics containing thermally-inhibited starches AB Thermally-inhibited starches and flours are used in cosmetic compns. such as skin and hair care products as emulsifiers, thickeners, and aesthetic control. 1.00, stearic acid 2.00, octyl palmitate 5.00, C12-15 alkyl benzoate 5.00, dimethicone copolyol 1.00, propylene glycol 3.00, triethanolamine 0.50, above thermally-inhibited CEPA-modified starch 2.00, preservative 1.00, and deionized water 79.50%. IT Antiperspirants Emulsifying agents Shampoos Sunscreens Thickening agents Wheat flour (cosmetics contg. thermally-inhibited starches) IT Shaving preparations (aftershaves, cosmetics contg. thermallyinhibited starches) IT Hair preparations (conditioners, cosmetics contg. thermallyinhibited starches)

TΨ

Cosmetics

Shaving preparations

(creams, cosmetics contg. thermally-inhibited

```
starches)
ΙT
    Hair preparations
        (dyes, cosmetics contg. thermally-inhibited
      starches)
ΙT
     Cosmetics
        (eye shadows, cosmetics contg. thermally-
     inhibited starches)
ΙT
     Hair preparations
        (gels, styling, cosmetics contg. thermally-
      inhibited starches)
TT
     Cosmetics
        (lipsticks, cosmetics contg. thermally-
      inhibited starches)
TΨ
     Cosmetics
        (lotions, cosmetics contg. thermally-inhibited
      starches)
IT
     Cosmetics
        (makeups, liq.; cosmetics contg. thermally-
      inhibited starches)
IT
     Cosmetics
        (mascaras, cosmetics contg. thermally-inhibited
      starches)
IT
     Cosmetics
        (mousses, cosmetics contg. thermally-inhibited
      starches)
ΤТ
     Cosmetics
        (powders, cosmetics contg. thermally-inhibited
      starches)
IT
     Antiperspirants
        (roll-on, cosmetics contg. thermally-inhibited
      starches)
IT
     Cosmetics
        (sprays, powder; cosmetics contg. thermally-
      inhibited starches)
IT
    Antiperspirants
        (sticks, cosmetics contg. thermally-inhibited
      starches)
     75-56-9D, Propylene oxide, derivs. with hydroxypropylated
IT
             2530-32-7D, Octyl succinic acid, derivs. with
     starch and aluminum sulfate 9005-82-7, Amylose
     10043-01-3D, Aluminum sulfate, derivs. with starch and
     octyl succinate
     RL: BUU (Biological use, unclassified); BIOL (Biological study);
     USES (Uses)
        (cosmetics contg. thermally-inhibited
      starches)
     9087-61-0P, Aluminum starch octenyl succinate
ΤТ
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (cosmetics contg. thermally-inhibited
     starches)
     64-17-5, Ethanol, uses
IT
     RL: NUU (Nonbiological use, unclassified); USES (Uses)
        (cosmetics contg. thermally-inhibited
      starches)
IT
     108-24-7, Acetic anhydride 9005-25-8, Starch, reactions
     RL: RCT (Reactant)
        (cosmetics contg. thermally-inhibited
      starches)
L5
    ANSWER 3 OF 10 HCA COPYRIGHT 1997 ACS
    Water-based adhesives containing thermally
TТ
     inhibited starches
AΒ
     Thermally inhibited starches and
     flours are used in conventional water-based adhesives such as
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```
corrugating, cigaret, and remoistenable adhesives. The starches or
     flours are.
    Drying
        (in manuf. of water-based adhesives contq. thermally
      inhibited starch)
IT
     Labels
     Lamination
        (thermally inhibited starch-based
        adhesives for)
IT
    Adhesives
        (water-based adhesives contg. thermally
     inhibited starches)
ΙT
     Tiles
        (ceramic, thermally inhibited starch
       -based adhesives for)
IT
     Tobacco products
        (cigarets, thermally inhibited starch
        -based adhesives for manuf. of)
IT
     9005-25-8, Starch, processes
                                   9045-28-7, Starch
     acetate 9049-76-7, Hydroxypropyl starch 169105-05-9
    RL: PEP (Physical, engineering or chemical process); TEM (Technical
    or engineered material use); PROC (Process); USES (Uses)
        (adhesives from starch inhibited by
      thermal treatment)
ΙT
     24937-78-8, Ethylene-vinyl acetate copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (remoistenable adhesives contg. thermally
      inhibited starch and)
    ANSWER 4 OF 10 HCA COPYRIGHT 1997 ACS
L5
TI
     Paper containing thermally inhibited
     starches as wet-end additives
ΑB
     Thermally-inhibited starches and
     flours, preferably cationic or amphoteric starches which
     are optionally chem. crosslinked, are added, primarily as wet end
     additives, to paper stock. The starch (I) is inhibited.
ST
     thermally inhibited starch papermaking
     additive; bonding retention paper thermally
     inhibited starch
IT
     Paper
        (thermally inhibited cationic starch
        as papermaking wet-end additive for improved dry bond strength
        and retention)
IT
     9005-25-8, Starch, uses
     RL: MOA (Modifier or additive use); USES (Uses)
        (thermally inhibited cationic starch
        as papermaking wet-end additive for improved dry bond strength
        and retention)
    ANSWER 5 OF 10 HCA COPYRIGHT 1997 ACS
ΤI
     Thermally inhibited starches and
     flours and process for their production
AB
     Thermally-inhibited, non-pregelatinized granular
     starches and flours derived from any native source, useful
     in foods and in the manuf. of industrial products, are produced by.
ST
     starch heating thermal inhibition
     gelatinization; heat treatment starch thermal
     inhibition gelatinization; gelatinization thermally
     inhibited waxy maize starch
IT
    Food
        (made by using thermally-inhibited flour;
      thermally inhibited starches and
        flours and process for their prodn.)
IT
     Flours and Meals
```

```
(thermally inhibited; thermally
      inhibited starches and flours and process for
        their prodn.)
     9005-25-8D, Starch, acid-converted
TΨ
    RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (and heat-treated; thermally inhibited
      starches and flours and process for their prodn.)
IT
     9005-25-8, Starch, processes
     RL: PEP (Physical, engineering or chemical process); PROC (Process)
        (waxy maize, heat-treated; thermally inhibited
      starches and flours and process for their prodn.)
    ANSWER 6 OF 10 HCA COPYRIGHT 1997 ACS
     Thermally inhibited pre-gelatinized
     starches and flours and process for their production
AΒ
     The title pre-gelatinized starches and flours are
     thermally inhibited and exhibit a non-cohesive
     texture when dispersed or dissolved in cold water. The starches are
     prepd. by dehydrating to a.
ST
     starch thermal inhibition
    pregelatinization; dehydration thermal inhibition
     starch
IT
    Dehydration, chemical
        (thermally inhibited pre-gelatinized
      starches and flours and process for their prodn.)
IT
     9005-25-8P, Starch, preparation
     RL: FFD (Food or feed use); IMF (Industrial manufacture); PRP
     (Properties); TEM (Technical or engineered material use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (thermally inhibited pre-gelatinized
      starches and flours and process for their prodn.)
     ANSWER 7 OF 10 HCA COPYRIGHT 1997 ACS
     Foods containing thermally-inhibited
     starches and flours
AΒ
     A thermally-inhibited granular starch
     or flour is used as an ingredient in various foods.
     thermally-inhibited starches are
     functionally equiv. to chem. cross-linked starches.
                                                          The
     starches or flours are prepd. by dehydrating the starch or flour to
     anhyd. or substantially anhyd. (<1% moisture), preferably.
     dehydration may be carried out by heating the starch, extg. the
     starch with a solvent, or freeze-drying the starch. The
     starch may be pregelatinized prior to or after
     thermal inhibition using known methods which do
    not substantially rupture the starch granules. Thus, to
     obtain a heat-stable, non-cohesive thickener, samples of granular
     starch were slurried in water, the pH of the. .
ST
    thermally inhibited starch flour
IT
    Amaranthus
    Barley
     Cassava
     Corn
     Cream substitutes
     Flours and Meals
     Food
     Freeze drying
     Frozen desserts
     Frozen foods
     Gravy
    Meat
     Pasta
     Rice
     Salad dressings
     Thickening agents
```

```
(thermally-inhibited starches and
        flours for food use)
     Potato
        (French fry, thermally-inhibited
      starches and flours for food use)
IT
        (breakfast cereal, thermally-inhibited
      starches and flours for food use)
IT
     Bakery products
        (cakes, cheese, thermally-inhibited
      starches and flours for food use)
     Food functional properties
IT
        (gelling, thermally-inhibited
      starches and flours for food use)
IT
     Jams and Jellies
        (grape, thermally-inhibited starches
        and flours for food use)
IT
     Frozen desserts
        (ice cream, thermally-inhibited
      starches and flours for food use)
IT
        (infant, thermally-inhibited starches
        and flours for food use)
     Bakery products
IT
        (muffins, thermally-inhibited
      starches and flours for food use)
ΙT
        (oven, thermally-inhibited starches
        and flours for food use)
IT
     Bakery products
        (pies, fruit, thermally-inhibited
      starches and flours for food use)
IT
     Condiments
        (sauces, thermally-inhibited starches
        and flours for food use)
ፐጥ
     Condiments
        (sauces, white, thermally-inhibited
      starches and flours for food use)
IT
        (sausage, frankfurter, thermally-inhibited
      starches and flours for food use)
IT
        (sour, thermally-inhibited starches
        and flours for food use)
ΙT
     Soups
        (vegetable, thermally-inhibited
      starches and flours for food use)
IT
     Food functional properties
        (viscosity, thermally-inhibited
      starches and flours for food use)
IT
     Milk preparations
        (yogurt, thermally-inhibited starches
     and flours for food use) 64-17-5, Ethanol, biological studies
ΙT
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (dehydration; thermally-inhibited
      starches and flours for food use)
     9005-25-8P, Starch, biological studies
                                                9037-22-3DP, Waxy
     starch, derivs. 9037-22-3P, Waxy starch
     60164-73-0P, Acetylated waxy starch
     RL: FFD (Food or feed use); IMF (Industrial manufacture); PRP
     (Properties); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (thermally-inhibited starches and
```

flours for food use)

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L5
    ANSWER 8 OF 10 HCA COPYRIGHT 1997 ACS
     Foods containing thermally-inhibited and
TТ
     pre-gelatinized starches and flours
AB
    A granular starch or flour which is both thermally
     -inhibited and pregelatinized is used as an ingredient in
     various foods. The starches are functionally equiv. to chem.
     cross-linked starches. The. . . preferably at a neutral or basic
     pH, for a time sufficient to inhibit the starch to the desired
     degree. The starch may be pregelatinized prior to or
     after thermal inhibition using known methods
     which do not substantially rupture the starch granules.
     Thus, starch slurries with pH adjusted to 6-10 with a 5% sodium
     carbonate soln. were pregelatinized in a pilot.
     food thermally inhibited pregelatinized
ST
     starch; flour thermally inhibited pregelatinized
IT
        (emulsified; thermally-inhibited and
        pre-gelatinized starches and flours for food use)
IT
     Amaranthus
     Bakery products
     Banana
     Barley
     Cassava
     Corn
     Flours and Meals
     Food
     Frozen desserts
     Frozen foods
     Gravy
     Pasta
     Pea
     Potato
     Puddings
     Rice
     Sago palm
     Salad dressings
     Sorghum
     Sweet potato
     Tomato paste, puree, and sauce
        (thermally-inhibited and pre-gelatinized
      starches and flours for food use)
IΤ
        (breakfast cereal, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
     Bakery products
TΤ
        (cakes, cheese, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
IT
     Rice
        (glutinous, flour, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
ፐጥ
     Jams and Jellies
        (grape, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
IT
     Food
        (infant, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
TΤ
     Bakery products
        (muffins, mix; thermally-inhibited and
        pre-gelatinized starches and flours for food use)
IT
     Bakery products
        (pies, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
ΙT
     Condiments
```

```
(sauces, thermally-inhibited and
       pre-gelatinized starches and flours for food use)
TΨ
    Condiments
       (sauces, barbeque, thermally-inhibited and
       pre-gelatinized starches and flours for food use)
ΤТ
    Cream
        (sour, thermally-inhibited and
       pre-gelatinized starches and flours for food use)
IT
    Food functional properties
        (viscosity, thermally-inhibited and
       pre-gelatinized starches and flours for food use)
    Milk preparations
TT
        (yogurt, thermally-inhibited and
        pre-gelatinized starches and flours for food use)
IT
     9005-25-8P, Starch, biological studies
                                             9037-22-3P, Waxy
     starch
     RL: FFD (Food or feed use); IMF (Industrial manufacture); PRP
     (Properties); BIOL (Biological study); PREP (Preparation); USES
        (thermally-inhibited and pre-gelatinized
      starches and flours for food use)
    ANSWER 9 OF 10 IFIPAT COPYRIGHT 1997 IFI
ACLM . . . an aqueous phase containing a polysaccharide
     water-thickener selected from the group consisting of natural and
     derivatized galactomannans, derivatized cellulose and
    starch, the improvement comprising an inhibitor
      of the thermal degradation of said thickener, said
    inhibitor comprising iodide ion compound selected from the
      group consisting of hydriodic acid, ammonium iodide, an
      alkyl-substituted ammonium iodide, or an.
   ANSWER 10 OF 10 USPATFULL
CLM
      What is claimed is:
      . an aqueous phase containing a polysaccharide water-thickener
      selected from the group consisting of natural and derivatized
       galactomannans, derivatized cellulose and starch, the
       improvement comprising an inhibitor of the
     thermal degradation of said thickener, said
     inhibitor comprising iodide ion compound selected from the
       group consisting of hydriodic acid, ammonium iodide, an
       alkyl-substituted ammonium iodide, or an.
=> s 15 and (non-pregelatinized)
L11
            1 FILE HCA
L12
            O FILE IFIPAT
L13
            O FILE USPATFULL
            0 FILE JAPIO
T.14
TOTAL FOR ALL FILES
L15
            1 L5 AND (NON-PREGELATINIZED)
=> d 115 ab
L15 ANSWER 1 OF 1 HCA COPYRIGHT 1997 ACS
    Thermally-inhibited, non-
    pregelatinized granular starches and flours
     derived from any native source, useful in foods and in the manuf. of
     industrial products, are produced by dehydrating and heat-treating a
     granular starch or flour at .gtoreq.100.degree.. These starches
     resist gelatinization or gelatinize to a limited extent without
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attaining a peak viscosity.

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L15
     ANSWER 1 OF 1 HCA COPYRIGHT 1997 ACS
     124:346442 HCA
ΑN
TI
     Thermally inhibited starches and
     flours and process for their production
IN
     Chiu, Chung-wai; Schiermeyer, Eleanor; Thomas, David J.; Shah,
     Manish B.
     National Starch and Chemical Investment Holding Co, USA
PA
     PCT Int. Appl., 49 pp.
so
     CODEN: PIXXD2
                     960215
ΡI
     WO 9604315 A1
     W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
DS
         GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT,
         UA, UZ
     RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR,
         IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
     WO 95-US684 950118
PRAI WO 94-US8559 940729
     US 94-296211 940825
DT
     Patent
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L5 ANSWER 6 OF 10 HCA COPYRIGHT 1997 ACS

AB The title pre-gelatinized starches and flours are thermally inhibited and exhibit a non-cohesive texture when dispersed or dissolved in cold water. The starches are prepd. by dehydrating to a substantially anhyd. state, and heat-treating at temp. .gtoreq.100.degree. to inhibit the starch. The starches may be used in place of chem. crosslinked pre-gelatinized starches in food and industrial applications.

## => d 15 6

L5 ANSWER 6 OF 10 HCA COPYRIGHT 1997 ACS

AN 124:320038 HCA

TI Thermally inhibited pre-gelatinized starches and flours and process for their production

IN Shah, Manish B.; Thomas, David L.; Chiu, Chung-wai

PA National Starch and Chemical Investment Holding Co, USA

SO PCT Int. Appl., 25 pp. CODEN: PIXXD2

PI WO 9604316 A1 960215

DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

AI WO 95-US688 950118

PRAI WO 94-US8559 940729

US 94-296211 940825

DT Patent